2016 Annual Sustainability Report: A Year of Innovation

FIT FOR THE FUTURE

The Centers for Disease Control and Prevention's Quality and Sustainability Office (QSO) drives efficiency efforts throughout the Agency and completes internal quality reviews of processes that incorporate tenets of resource capital management. Aligning with the CDC mission to protect America from health, safety, and security threats, QSO is committed to meeting or exceeding Executive Order 13693 goals to build Agency resiliency and promote efficiency. QSO furthermore promotes the many long-term health aspects of sustainable practice and leads initiatives in building health innovation, seeking to increase productivity and work-life wellness for the American public.



U.S. Department of Health and Human Services Centers for Disease Control and Prevention



Independent Power: The Roybal Visitors Center parking deck features a 9KW solar array that offsets power usage of the main campus.



Built Sustainability through Wellness: CDC's National Center for Chronic Disease Prevention and Health Promotion received the first official 3-star Fitwel certification, the highest Fitwel rating.

SUSTAINABILITY GOAL AREAS

GOAL 1A Energy/GHG Emissions Reduction, Bruce Jue

Scope 3 GHG Emissions Reduction, Scott Kemp GOAL 1B

GOAL 2 Sustainable Buildings, Steve Klim

GOAL 3 Fleet Management, Shirley Alston

GOAL 4 Water Efficiency, Bruce Jue

GOAL 5 Waste Management, Willie Potter

GOAL 6 Sustainable Acquisitions, Sarah Gray

GOAL 7 Electronic Stewardship, Tim Horner

GOAL 8 Renewable Energy, Bruce Jue

GOAL 9 Climate Resilience, Lauren Dufort

GOAL 10 Performance Contracts, Steve Klim and Sarah Gray

PROJECTS AND ACHIEVEMENTS

Battery and Coffee Capsule Recycling Pilot

Originating as a grassroots effort to dispose of hard-to-recycle items, QSO facilitated battery box and coffee capsule recycling programs in several CDC offices. Due to its success, this voluntary effort will expand in 2017.

Electric Vehicle (EV) Charging Initiative 🕮 🕒





OSSAM's Transportation Services Office (TSO) implemented employee EV charging on CDC campuses. Prior to a six-month trial period, TSO benchmarked agency efforts against other federal agencies and major corporations across metro Atlanta. As of December 2016, the award-winning program features 82 users at CDC-owned campuses.

Building Setback Pilot (*)

During extreme weather temperatures in the summer or winter, energy costs can increase to as much as nine times the normal rate. OSSAM launched a building setback pilot during the summer of 2016 to observe how beginning a building's "unoccupied" mode slightly earlier each afternoon decreased energy consumption. This pilot launced successfully with few complaints and an achieved reduction in monthly energy and water costs.

Solar Power on Roybal Campus and Beyond 💮 😥

2016 saw the first building-integrated solar photovoltaic (PV) project on a CDC campus. The Roybal Visitors Center parking deck features 9 kilowatt array that offsets power use of the campus. At the museum entrance, visitors can view a dashboard which informs observers of the power generated by the array and other sustainability facts. This project was a great success due to the partnership of the CDC Museum staff.

FITWEL Certification

A CDC building on the Chamblee campus that houses CDC's National Center for Chronic Disease Prevention and Health Promotion received the first official 3-star Fitwel certification, the highest rating. This achievement demonstrates CDC's commitment to ensuring occupant health within its campus, and represents larger support for the Fitwel certification nationally as a health tool.

Energy & Water Performance Contracting (a) 🛕 🕏 🔤

Performance contracting is an innovative financing mechanism that uses cost savings from reduced energy consumption to repay the cost of installing new Energy and/or Water Conservation Measures (ECMs). The Atlanta Utility Energy Savings Contract includes \$5.6 million worth of ECMs that will save an average of 19,205 MMBTUs of energy per year. The Pittsburgh Energy Savings Performance Contract features \$14.5M of ECMs and is anticipated to save over 58,000 million British Thermal Units of energy per year. Construction has commenced on both projects.

Health in Materials 🔒 🔯

Recognizing CDC's mission to protect and promote health, QSO provides thought leadership on the discussion of health in building materials. A task force was formed to explore healthy materials certifications and update project specification guidelines to include requirements for materials that meet these criteria.



OUTREACH AND PARTNERSHIPS

Broadening CDC's internal and external outreach, office initiatives made FY 2016 a year of building expansive, strategic partnerships. Several initiatives were launched to promote creative collaboration, thought leadership, and engagement.

Energy Deputies (*)

Volunteer CDC Energy Deputies identify and report wasteful practices within their offices and share energy management strategies with their peers. The program includes Deputies from CDC campuses nationwide and features a guarterly newsletter for engagement and education.

Recycling Ambassadors

The Recycling Ambassador initiative identifies recycling liaisons in each office. Ambassadors volunteer to educate their colleagues and identify problem areas with single-stream recycling as well as laboratory recycling where feasible.

Ryan Gravel at HHS Green Champion Awards

Ryan Gravel, the visionary behind the Atlanta Beltline Project and author of Where We Want to Live, provided an insightful keynote discussion on urban planning, sustainability, and its connection to public health at the Green Champion Awards Ceremony.

America Recycles Day at Emory Point 🔯 💂

Keep America Beautiful annually coordinates a national America Recycles Day event. On November 15th CDC partnered with Emory Point and Emory University to jointly host a largely successful Clifton Corridor community recycling drive.

Sustainable Buildings Lunch and Learn Series 🔔

OSSAM leadership hosted a series of lunch and learn sessions to educate employees on green building certification systems including WELL, Living Building Challenge, LEED v4 and updated the Guiding Principles for Federal High Performance Buildings. Rating systems

and the updated Guiding Principles were analyzed, evaluated and compared by subject matter experts with the goal of understanding which system is best fit for any given building project.

Earth Week partnership



OSSAM's QSO and Worklife Wellness Office (WWO) partnered to co-host Earth Week and launch the Healthiest CIO Challenge. Throughout the week, CDC staff participated in campus Earth Walks, wellness seminars, and four campus expos in Metro Atlanta.

North American Laboratory Freezer Challenge

Based on the success of the 2012 CDC Freezer Challenge, QSO provided subject matter expertise toward the formation of The North American Laboratory Freezer Challenge.

FITWEL A

In an effort to create robust and healthy built environments, CDC, the General Services Administration (GSA), and the New York City Department of Health and Mental Hygiene (DOHMH) jointly developed Fitwel,SM a voluntary national certification that supports healthier building environments and improves employee health and productivity.

Lactation Rooms

QSO leadership provided subject matter expertise toward the revision of the 2008 American Institute of Architects (AIA) Best Practices Lactation Room Guide, creating the 2016 AIA Best Practices Wellness Room Design Guide. The guide promotes sustainability, while bridging the gap between architects and health.



Lessons Learned: Keynote speaker Ryan Gravel discusses building sustainable communities at the Green Champions ceremony



Steps Forward: CDC staff partake in a flash mob as a part of Earth Week and the Healthiest CIO Challenge.



America Recycles Day: Volunteers collected 200 pairs of shoes and about 12.000 lbs. of e-waste. paper, glass, plastic, cardboard and clothing.



29.19%

Total gross square feet compliant with Federal Guiding Principles for Federal Buildings



477 Employee Carpools



82 Electric Commuter Vehicles

263 Electric Fleet Vehicles

LETTER FROM THE CSO



On behalf of the Office of Safety, Security and Asset Management's (OSSAM) Quality and Sustainability Office (QSO), I would like to thank everyone at Centers for Disease Control and Prevention/ Agency for Toxic Substances and Disease Registry (CDC/ATSDR) for your support of our agency's award-winning initiatives in 2016. Through coordination, integration, promotion, and measurement, QSO identified new technologies, implemented

innovative pilots, and developed new partnerships with other institutions working toward similar health and environmental goals. Our efforts have yielded incredible results that will help CDC conserve financial and environmental resources, ensuring CDC's mission to protect the health of our people and our planet. Sincerely,

Liz York, FAIA, LEED AP, CNU-A Chief Sustainability Officer Associate Director of Quality and Sustainability

LOOKING AHEAD IN 2017

ENERGY CONSERVATION MEASURES (ECMS) Over the next two years, construction on ECMs for the performance contract construction projects will be in full swing, most notably including 420kW of photovoltaic solar panels on Roybal, Chamblee, and Lawrenceville campuses. Other projects include utility infrastructure upgrades at NIOSH Pittsburgh, sub-meter installations and LED lighting upgrades.

BUILDING SETBACK In the summer of 2017, OSSAM intends to implement a second energy-saving setback program, adding three more office buildings to the program.

2017 FREEZER CHALLENGE Kicking off 2017, OSSAM will coordinate CDC participation in the North American Laboratory Freezer Challenge (www.freezerchallenge.org). The Freezer Challenge benefits both the Agency as a whole and CDC researchers by improving quality, increasing storage space, saving money on utility costs, and conserving energy.

WASTE CHARACTERIZATION STUDY CDC stakeholders will evaluate opportunities for expanded recycling efforts across the agency.

QUARTERLY FITWEL BUILDING CERTIFICATIONS With the success of CDC's first Fitwel certification, OSSAM's Asset Management Services Office will pursue certification for one new CDC building each quarter through FY18.

GUIDING PRINCIPLES COMPLIANCE OSSAM's Asset Management Services Office staff will pursue at least one GP certified building each year toward 100% compliance.

WATER HUB FEASIBILITY STUDY CDC's EO 13693 goals, aging infrastructure, increased water scarcity and rising rates for potable water use make it imperative that CDC reduce and conserve its reliance on the potable water supply. CDC is exploring possibilities for alternative process water and plans to continue this project throughout 2017.

AWARDS/RECOGNITION





GreenGov Presidental Award

Green Champions Award

GREENGOV PRESIDENTIAL AWARD

HHS EV FLEET WORKGROUP: The White House awarded CDC. National Institutes of Health (NIH), and Food and Drug Administration (FDA) for developing innovative plans to make EV commuting easier for Federal employees.

FY 2015 HHS GREEN CHAMPION AWARD WINNERS

CHANGE AGENT: Ken Ivery

CORPORATE RESPONSIBILITY: Scott Kemp

GOOD NEIGHBOR AWARD: Antonia Calafat, Lauren Dufort, Trudi Ellerman, Julie Fishman, Judy Gantt, LT James Gooch, Maria Jolly, Carol Merkin, Von Roebuck, Alex Rogers, Louise Shaw, Caryn Womack, Liz York, and Sally Zimmerman

ELECTRONIC STEWARDSHIP: Dave Ausefski, Rob Curlee, Christopher Gandy, Joe Jackson, James Landers and Howard Smith

ELECTRONIC STEWARDSHIP II: Eric Emde and Ronald Lake

ENERGY AND FLEET: Shirley D. Alston, Shane M. Beidler, Willie S. Betts, Ann M. Gamble, Kashara G. Henderson, Lisa Mackey, Anthony McMillon, Lance A. Myers, Kenneth R. Tatum and Davis (Jake) Toothman

GREEN HERO VIDEO OUTREACH: Tim Davenport, Phyllis James, Kendrick Johnson, Tommy Kendricks and Donald Powell

SUSTAINABLE ACQUISITIONS: Darrin Barber, Ronald Cummings, Lauren Dufort, Jeff Haves and Steve Klim

SUSTAINABLE DESIGN & FACILITIES: Neal Bowman, Steve China, Daniel Corbett, Darren Dean, Ted Hyatt, Keith Minor and Mike Ruiz

2016 SUSTAINABILITY STARS

GREGORY LANGHAM, Plastic Barrel Recycling

CECIL ARMSTRONG, Employee Engagement, Building a GGGH Culture **CDC SUSTAINABILITY GOAL MANAGERS** (see Sustainability Goal Areas)

NATHANIEL POWEL AND GEORGE LATHROP, Comparative Medicine Branch

NORTHSTAR TECHNOLOGY CORPORATION

NANCY KLUISZA, Recycling Advocate

RACHEL WORLEY, CDC Community Garden

JOANNE KLEVENS, Sustainable Lifestyle

OADLSS AND NCEZID, Coffee Capsule Recycling Program

